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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,818	05/29/2002	Hermanus Johannes Waanders	220664US6PCT	9369

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EXAMINER

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,818

Applicant(s)

WAANDERS, HERMANUS
JOHANNES

Examiner

Victor MacArthur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

Claims 6 and 15 are objected to because of the following informalities:

- The phrase “have a substantially equal diameter” (line 2 of claims 6 and 15) should be replaced with the phrase “have substantially equal diameters” to improve clarity.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

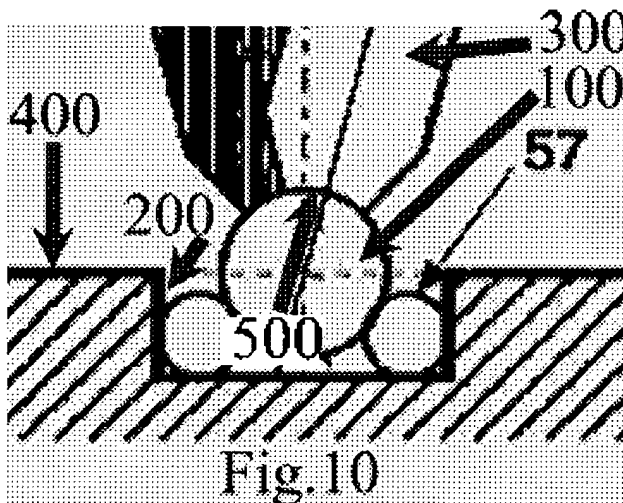
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 8, 11-13, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Potzick U.S. Patent 5568993 (see marked-up fig.10 below).



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Claim 1. Potzick discloses (figs.3 and 10) an assembly comprising a first object (18, 30 and 300) and a second object (22 and 400) and support means for supporting the first object above the second object, the support means including first, second and third protrusions (100), protruding from the first object and first, second and third pairs of protrusions (57) protruding from the second object, the first, second and third protrusions of the first object and each protrusion of the first, second and third pairs of protrusions of the second object have a substantially spherically-shaped extremity, and when the first and second objects are in an operational position so that the first object is above the second object, the first protrusion of the first object contacts both protrusions of the first pair of protrusions of the second object, the second protrusion of the first object contacts both protrusions of the second pair of protrusions of the second object and the third protrusion of the first object contacts both protrusions of the third pair of protrusions of the second object.

Claim 2. Potzick discloses that the substantially spherically-shaped extremity of each of the first, second, and third protrusions of the first object has a center and together the centers of the substantially spherically-shaped extremities of the first, second and third protrusions of the first object define vertices of a first triangle.

Claim 3. Potzick discloses that the substantially spherically-shaped extremity of each protrusion of the first, second and third pairs of protrusions of the second object has a center such that midpoints of connecting lines between the centers of the substantially spherically-shaped extremities of each pair of protrusions of the first, second and third pairs of protrusions define vertices of a second triangle, the second triangle being substantially identical to the first

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triangle defined by the centers of the substantially spherically-shaped extremities of the first, second and third protrusions of the first object.

Claim 7. Potzick discloses that the assembly further comprises fastening means (34) for mutually fastening the first and second objects in the operational positions thereof

Claim 8. Potzick discloses that the fastening means include a screwed connection (36 as seen in figs.4 and 6) provided for the mutual fastening of the combined objects.

Claim 11. Potzick discloses (figs.3 and 10) an assembly comprising: a first plate (26) supported above a second plate (22, 400); and a supporting device (28, 30) configured to support the first plate above the second plate, the supporting device including first, second and third protrusions (30, 300, 100) protruding from the first plate and first, second and third pairs of protrusions (57) protruding from the second plate, wherein each protrusion of the first, second and third protrusions of the first plate and each protrusion of the first, second and third pairs of protrusions of the second plate have substantially spherically-shaped extremity (100, 57), and when the first and second plates are in an operational position so that the first plate is above the second plate, the first protrusion of the first plate contacts both protrusions of the first pair of protrusions of the second plate, the second protrusion of the first plate contacts both protrusions of the second pair of protrusions of the second plate and the third protrusion of the first plate contacts both protrusions of the third pair of protrusions of the second plate.

Claim 12. Potzick discloses that the substantially spherically-shaped extremity of each of the first, second and third protrusions of the first plate has a center and together the centers of the substantially spherically shaped extremities of the first, second and third protrusions of the first plate define vertices of a first triangle.

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Claim 13. Potzick discloses that the substantially spherically shaped extremity of each protrusion of the first, second and third pairs of protrusions of the second plate has a center such that midpoints of connecting lines between the centers of the substantially spherically shaped extremities of each pair of protrusions of the first, second and third pairs of protrusions define vertices of a second triangle, the second triangle being substantially identical to the first triangle defined by the centers of the substantially spherically shaped extremities of the first, second and third protrusions of the first plate.

Claim 16. Potzick discloses a fastening device (34) for mutually fastening (via 30) the first and second plates in the operational positions thereof.

Claim 17. Archibald discloses that the fastening device includes a screwed connection (36 as seen in figs.4 and 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN Potzick U.S. Patent 5568993 (see marked-up fig.10 above) in view of Archibald U.S. Patent 4290574.

Claim 5. Potzick discloses that each protrusion of the first, second and third protrusions of the first object and each protrusion of the first, second and third pairs of protrusions of the

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second object are balls, the balls being partially embedded (within cylindrical recess 500, col.5, ll.55-60) into the second object. The word “embedded” is taken by the examiner to mean, “surrounded closely” in accordance with Merriam-Webster’s Collegiate Dictionary Tenth Edition. Potzick does not expressly disclose what material the balls are made from. Archibald teaches (col.3, ll.1-10) balls made of a metal material (steel) for the purpose of resisting deformation and erosion. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to make the Potzick balls from metal, as taught by Archibald, for the purpose of resisting deformation and erosion.

Claim 6. Potzick as modified by Archibald suggests that the metal (Archibald) balls have substantially equal diameters (fig.10 of Potzick). The word “substantially” is taken by the examiner to mean “being largely but not wholly what is specified” in accordance with Merriam-Webster’s Collegiate Dictionary Tenth Edition.

Claim 10. Potzick discloses (figs.3 and 10) a method for supporting a first object (18, 30, 300) on a second object (22), comprising the steps of: making first, second and third indentations (500) in the first object; subsequently fitting first, second and third balls (100) each having a substantially ball-shaped extremity into the first, second and third indentations, respectively, made in the first object, wherein a center of each of the first, second and third metal balls of the first object defines a vertex of a first triangle; making first, second and third pairs of indentations (portion of 200 receiving left 57 and portion of 200 receiving right 57) in the second object; subsequently fitting a substantially ball-shaped extremity of each of the first, second and third pairs of balls into the first, second and third pairs of indentations, respectively, made in the second object, wherein the substantially ball-shaped extremity of each ball of the first, second

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and third pairs of the balls has a center and midpoints between connecting lines connecting the centers of each pair of the balls of the first, second and third pairs of the balls define vertices of a second triangle which is substantially identical to the first triangle; and placing the substantially ball-shaped extremity of each of the first, second and third balls of the first object into supporting contact on the substantially ball-shaped extremities of the first, second and third pairs of the balls, respectively of the second object, wherein the first ball of the first object contacts both of the first pair of the balls of the second object, the second ball of the first object contacts both of the second pair of the balls of the second object and the third ball of the first object contacts both of the third pair of the balls of the second object. Potzick does not expressly disclose what material the balls are made from. Archibald teaches (col.3, ll.1-10) balls made of a metal material (steel) for the purpose of resisting deformation and erosion. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to make the Potzick balls from metal, as taught by Archibald, for the purpose of resisting deformation and erosion.

Claims 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN Archibald U.S. Patent 4290574 in view of Potzick U.S. Patent 5568993 (see marked-up fig.10 above).

Claim 11. Archibald discloses (figs.3 and 10) an assembly comprising: a first plate (26) supported above a second plate (10); and a supporting device (32, 34, 36, 18, 20, 22) configured to support the first plate above the second plate, the supporting device including first, second and third protrusions (32, 34, 36) protruding from the first plate; and first, second and third bottom

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protrusions (18, 20, 22) protruding from the second plate, wherein each protrusion of the first, second and third protrusions of the first plate have a substantially spherically-shaped extremity, and when the first and second plates are in an operational position so that the first plate is above the second plate, the first protrusion of the first plate contacts the first bottom protrusion of the second plate, the second protrusion of the first plate contacts the second bottom protrusion of the second plate and the third protrusion of the first plate contacts the third bottom protrusion of the second plate. Archibald discloses that one (18) of the bottom protrusions has a pair of substantially spherically-shaped extremities. Archibald discloses that the remaining two bottom protrusions are shaped differently but that it is well known in the art to have three identically shaped bottom protrusions (col.1, ll.35-42). Potzick illustrates (figs.3 and 10) that it is well known in the art to have three identical bottom protrusions each bottom protrusion having a pair of substantially spherically-shaped extremities (57). It appears that identically shaping all of the bottom projections simplifies the machining process since only one type of projection shape needs to be machined. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the bottom projections of Archibald to each be identically shaped such that each bottom projection has a pair of substantially spherical-shaped extremities, as is illustrated to be well known by Archibald and Potzick, for the purpose of simplifying machining process.

Claim 14. Archibald as modified by Potzick suggests that each protrusion of the first, second and third protrusions of the first plate and each protrusion of the first, second and third pairs of protrusions of the second plate are formed by metal balls (col.3, l.1 – col.4, l.5), the

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metal balls being partially embedded (via welding, col.3, l.1 – col.4, l.5) into either the first plate or the second plate.

Claim 15. Archibald as modified by Potzick suggests that the metal balls have a substantially equal diameter (as seen in figs. 4 and 5 of Archibald). The word “substantially” is taken by the examiner to mean “being largely but not wholly what is specified” in accordance with Merriam-Webster’s Collegiate Dictionary Tenth Edition.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection, which were necessitated by amendment.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

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VLM
December 14, 2003



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